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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR . ATTORNEY DOCKET NO. 8976-19259 08/926,277 09/05/97 VACHRIS **EXAMINER** MM91/0809 ROSEMBERGEF. R MORRIS MANNING & MARTIN PAPER NUMBER **ART UNIT** 1600 ATLANTA FINANCIAL CENTER 3343 PEACHTREE NE ATLANTA GA 30326 2877 **DATE MAILED:** 08/09/61

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/926,277

Applicant(s)

VACHRIS et al.

Examiner

Richard Rosenberger

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Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE	The MAILING DATE of this communication appears	on the cover sheet with the correspondence address
This action is FINAL. 2b) This action is non-final. 3] Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4) Claim(s) 64-96	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 Cl after SIX (6) MONTHS from the mailing date of this communic. If the period for reply specified above is less than thirty (30) days be considered timely. - If NO period for reply is specified above, the maximum statutory communication. - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	FR 1.136 (a). In no event, however, may a reply be timely filed ation. The proof of the statutory minimum of thirty (30) days will be be statutory minimum of thirty (30) days will be statuted will apply and will expire SIX (6) MONTHS from the mailing date of this statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims	_	2001 .
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4) Claim(s) 64-96	2a) ☐ This action is FINAL . 2b) ☑ This act	ion is non-final.
Algorithm Algo	· · · · · · · · · · · · · · · · · · ·	
day of the above, claim(s)	Disposition of Claims	
Solution Solution	4) 💢 Claim(s) <u>64-96</u>	is/are pending in the application.
Claim(s) 64-96 is/are rejected. 7)	4a) Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	5)	is/are allowed.
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on	6) 💢 Claim(s) <u>64-96</u>	is/are rejected.
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are objected to by the Examiner. 11) The proposed drawing correction filed on is: a} approved b} disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) All b Some* c None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 15) Notice of References Cited (PTO-892)	7)	is/are objected to.
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on	8) Claims	are subject to restriction and/or election requirement.
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) All b) Some* c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). 19) Notice of Informal Patent Application (PTO-152)	9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are 11) The proposed drawing correction filed on	is: a)□ approved b)□ disapproved.
Attachment(s) 15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s) 18) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)	 13) ☐ Acknowledgement is made of a claim for foreign p a) ☐ All b) ☐ Some* c) ☐ None of: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority described application from the International Bure 	re been received. re been received in Application No ocuments have been received in this National Stage au (PCT Rule 17.2(a)).
15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)	-	priority under 35 U.S.C. § 119(e).
16] Notice of Draftsperson's Patent Drawing Review (PTO-948) 19] Notice of Informal Patent Application (PTO-152)		18) Interview Summary (PTO-413) Paper No(s).
	16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)

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- 1. The text and numbering of the claims as presented in the amendment filed 31 May 2001 is taken as being correct. It is noted that there was an error in the renumbering of the claims as set forth in the previous office action; the claims as renumbered should have been 45-96, not 45-95 as set forth in that action, and the error affected some of the claims as discussed in the previous office action. Any confusion resulting form this error is regretted.
- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 64-77, 80 and 81 are rejected under 35 U.S.C. 112, first paragraph for not being properly supported by the specification as filed and under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There are two distinct general embodiments of the invention as disclosed.

The first, shown in figures 1, 1A, 3, 4 and 5, is a single electrode electroluminescent device which uses the object being measured as a second electrode. The second embodiment, shown in figure 2, is an electroluminescent device with two electrodes,

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one being flexible, and with a variable resistive layer under the flexible electrode, with the object being measured contacting the flexible electrode.

Independent claims 64, 80 and 81 are a mixture of the two general embodiments, claims both and neither in a undisclosed manner.

Claim 64 calls for a system with a flexible electrode and variable resistive layer, and also having an electrical current source having two leads, with one lead connected to an electrode of the electroluminescent device and "a second lead for coupling to a relief object contacting said flexible electrode". There is no disclosure for such an arrangement. The disclosed embodiment with a flexible electrode (figure 2) does not couple to second lead to the relief object, but to the flexible electrode directly, while the embodiments which couple the second lead form the electrical current source to the relief object (figures 1, 1A, 3, 4, and 5) do not have the variable resistive layer or the flexible electrode. Claims 65-77 inherit this rejection from their parent claims 64.

Claim 80, is also mixture of the two embodiments. It calls for coupling a second lead form the electrical current source to a relief object, but also claims the system has a second, flexible electrode and a variable resistive layer. As set forth in the previous paragraph, there is no disclosure for the claimed arrangement.

Claim 81 is a method claim, which claims "coupling said current source to said relief object" but also claims a flexible electrode and variable resistive layer, which, as discussed above, has no basis in the disclosure.

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These claims are clearly claiming the first and not the second embodiment; in the second embodiment the power supply is not "coupled" to the relief object.

However, both claims also claim the presence of the second, flexible electrode. Thus they cannot be claiming the first embodiment, but are claiming the second, the first embodiment has no such flexible electrode, and is a single electrode device. Thus these claims are clearly both claiming and not claiming both embodiments in a unclear, confusing, and incorrect mixture of the two. The specification simply does not disclose a single electrode device with two electrodes which uses both the object being measured as an electrode and also uses a flexible second electrode.

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 78 and 79 are rejected under 35 U.S.C. 103(a) as obvious over Gaffney (WO 9716834).

Gaffney teaches the claimed use of a device with two electrodes, one of them being a flexible electrode, a light emitting layer between the electrodes, and a

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wariable resistive layer between the flexible electrode and the light emitting layer. When a relief object is brought into contact with the flexible electrode, localized pressure gradients create a light image of the relief object. It would have been obvious to use any known variable resistive layer for that of Gaffney, the instant specification notes that the claimed variable resistive layers are known in the art (see the instant specification, page 15, line 1).

6. Claims 82-96 are are rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent abstract XP-002080114, Derwent abstract XP-002080115 and the Abstract of Japanese patent 02126381.

All three references teach the basic disclosed invention. The use of any known electroluminescent material, be it organic or inorganic, would have been obvious. Those of ordinary skill could have made the surface any desired shape to accommodate the relief object to be measured; it is well-known in the art that fingerprints are curved and that curved surfaces can better accommodate fingerprints than flat surfaces. Those in the art could form that various parts of the device by any known manufacturing technique and of any known materials appropriate to the construction.

7. The arguments filed 31 May 2001 have been considered but have not been found persuasive.

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It is argued that the Gaffney reference does not teach a variable resistive layer being comprised of conductive particles dispersed through a non-conductive medium, but rather shows a piezoelectric pressure transducer. This is of course correct, the rejection is in no way based upon any allegation that the pressure transducer of Gaffney is one comprised of conductive particles dispersed through a non-conductive medium. However, Gaffney teaches that the function of the pressure transducer used in that disclosure is one "whose resistivity varies as a function of pressure" (abstract). It would have been obvious, given the teaching in Gaffney of using "a material or structure whose resistivity varies as a function of pressure", to use a material or structure whose resistivity varies as a function of pressure, such as the acknowledged as known pressure sensitive materials of the sort claimed.

The argument that the art does not teach an organic electroluminescent material as the electroluminescent material for using in the devices of the references. But organic electroluminescent materials as acknowledged in the instant specification as known, and nothing in the references or in the art would suggest to those in the art that fictionally organic electroluminescent materials are sufficiently different form inorganic ones that the two would not obviously be substitutable for each other with appropriate obvious changes to the power supplied.

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8. Papers related to this application may be submitted to Group 2800 by facsimile transmission. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The fax number is (703) 308-7722.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberger whose telephone number is (703) 308-4804.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.